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EARLY ADOLESCENT DECISION MAKING AND BEHAVIORAL ADJUSTMENT: ARE ASSOCIATIONS MODERATED BY RELATIONSHIP QUALITY?

A Thesis

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Master of Science
in

The School of Human Ecology

by
Matthew D. Marrero
B.S., University of New Orleans, Louisiana, 2004
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ABSTRACT

The purpose of this study was to examine the associations between early adolescent decision making and behavioral adjustment with special interest in the interaction between parent-child relationship quality and decision making on behavioral adjustment. Associations were examined using data provided by 218 early adolescents. Girls comprised half the sample and the mean age was just over 11 years old. Main effects were consistent with previous research. Early adolescent decision making was associated with greater behavior problems and depressed mood. Parent-child relationship quality was defined as conflict and acceptance. Greater conflict was associated with poor behavioral adjustment while greater acceptance was associated with more positive behavioral adjustment. Multiple regression analysis was used to test possible interactions between early adolescent decision making and conflict and acceptance on each behavioral adjustment variable (behavior problems, depressed mood, and school performance). Consistent with previous research, neither conflict nor acceptance moderated the associations between early adolescent decision making and behavioral adjustment.

1. INTRODUCTION

1.1 Adolescence

The transition into adolescence is a developmental period that is often marked by substantial changes in behavior including the early adolescent making more decisions about one's self. During this period, early adolescents want to make more decisions about their behaviors, such as what clothes to wear and thus challenge parental legitimacy over decision making (Smetana, 1988). Adolescent decision making in the absence of parental guidance may have adverse consequences for the adolescent's behavioral adjustment.

1.2 Statement of Problem

Although theorists argue that establishing autonomy and making one's own decisions is an essential developmental task, empirical evidence is inconclusive in regard to whether greater adolescent decision making is linked to more positive behavioral adjustment (Lamborn, Dornbusch, & Steinberg, 1996). Some studies suggest more adolescent decision making is associated with poor behavioral adjustment. Beyers and Goossens (1999) reported that adolescents who experience more decision making autonomy reported lower school achievement and greater deviant behavior. In contrast, other studies have indicated that adolescent decision making is associated with positive behavioral adjustment. Smetana, Campione-Barr, and Daddis (2004) found that in late adolescence decision making over personal (i.e., what clothes to wear) and multifaceted (i.e., what TV shows to watch or music to listen to) issues predicted positive behavioral adjustment including less depression and greater feelings of self worth. One possible source of this inconsistency may be the family context within which adolescents make

decisions. That is, a family with strong bonds may be the ideal context in which to develop healthy decision making. In one study, a family environment that was rated as high in connectedness and support, predicted more adolescent decision making (Peterson, Bush, & Supple, 1999), but the consequences of decision making in supportive versus unsupportive contexts is unknown. The current study will focus on the quality of the parent-child relationship as the context within which early adolescent decision making takes place to determine whether parent-child relationship quality moderates the association between early adolescent decision making and behavioral adjustment.

1.3 Hypotheses and Research Question

The purpose of this proposed study is to explore the link between early adolescent decision making and early adolescent behavioral adjustment. Specifically, this study aims to test potential moderating effects of the quality of the mother-child relationship on the link between early adolescent decision making and behavioral adjustment. Hypothesis 1 states that early adolescents who report more decision making will report more negative behavioral adjustment including more problem behaviors, depression, and lower school performance. Hypothesis 2 states that more conflict will be associated with more behavior problems, more depressed mood, and lower school performance. Hypothesis 3 states that more acceptance will be associated with less behavior problems, less depressed mood, and greater school performance. Hypothesis 4 states that parent-child relationship quality will interact with early adolescent decision making such that within the context of high parent-child relationships, early adolescents who report more decision making will report less problem behaviors, less depressed mood, and better school performance than their peers who report lower parent-child relationship quality.

1.4 Delimitations

The sample was recruited in south Louisiana and therefore may be difficult to generalize to other regions of the country. Longitudinal data is needed in order to infer causal relationships.

1.5 Assumptions

There are several assumptions which guide this study:

1. It is assumed that there are no order effects occurring from the different instruments used during the interview.
2. It is assumed that both the mother and early adolescent responses are truthful.
3. It is assumed that the constructs (i.e., Decision making, conflict, acceptance, behavior problems, child depressed mood, and school performance) used are reliable and validly measure what they are intended to measure.

1.6 Definitions

The following terms are used throughout the paper. The definitions are as follows.

Early adolescent: a person between the ages 9 and 13 who has recently entered adolescence.

Decision making: the ability to make one's own decisions about one's behaviors (Bosma, Jackson, Zijsling, Zani, Cicognani, Xerri, Honess, & Charman, 1996).

Autonomy: to be self-governing.

Moderation: "a third variable that affects the direction and/or strength of relation between the independent and dependent variables" (Baron & Kenney, 1986, p. 1174).

2. REVIEW OF LITERATURE

2.1 Overview

The review of literature will be divided into four sections. The first section will discuss autonomy theory and operationalization; the second section will review empirical evidence linking decision making to adolescent behavioral adjustment; the third section will review empirical evidence connecting parent-child relationship quality to adolescent behavioral adjustment; and the final section will discuss the conceptualization of, and statistical approach to testing, moderation.

2.2 Autonomy Theory and Operationalization

Most of the research conducted on adolescent autonomy was influenced by psychoanalytic theory, which depicts autonomy development through individuation from parental ego extension and into the adolescent's own ego formation (Blos, 1979). Individuation contains both emotional and behavioral components. The emotionally individuated adolescent can fully discriminate between self and others. Behavioral individuation refers to a sense of responsibility for one's actions and decisions. According to Blos (1979) this process of individuation and autonomy development is an adaptive progression of adolescent development.

Following the conceptualization of Blos (1979), Steinberg and Silverberg (1986) developed the *Emotional Autonomy Scale* (*EAS*) which assessed four aspects of emotional autonomy: perceives parents as people, parental de-idealization, non-dependency on parents, and individuation. The aim of Steinberg and Silverberg (1986) was to use the *EAS* to provide details about the development of emotional autonomy and its relations to susceptibility to peer pressure and subjective feelings of self reliance.

Steinberg and Silverberg (1986) wanted to show that the family world (emotional autonomy) and the peer world (behavioral autonomy) were very closely related. They reported that as the adolescents' age increased, s/he became less parent oriented (emotionally autonomous) and more peer oriented (behaviorally autonomous) through less resistance to peers such as making decisions based on peer preferences. This occurs until ninth grade, when adolescents begin to stand on their own and become less susceptible to peers, thus beginning to make their own decisions separate from parents and peers. According to Steinberg and Silverberg (1986), the development of a more individuated sense of self is a normal and healthy aspect of adolescence.

Ryan and Lynch (1989) claim that Steinberg and Silverberg (1986) may not have measured emotional autonomy correctly, but in fact were measuring adolescent detachment. Ryan and Lynch (1989) propose that detachment is a measure of the lack of attachment in the parent-child relationship. They claim that detachment does not facilitate individuation. Using the *EAS,* Ryan and Lynch (1989) found that adolescents who reported greater emotional autonomy reported low parental acceptance and family cohesion. Thus, Ryan and Lynch (1989) concluded that emotional autonomy measured by the *EAS* is negative and leads to the perception of parental rejection because the *EAS* does not accurately assess emotional autonomy but instead measures a lack of attachment between parent and child.

As suggested by Ryan and Lynch (1989), Steinberg and Silverberg's (1986) *Emotional Autonomy Scale* may have been measuring adolescent detachment or adolescents who are rejecting their parents (e.g., from *EAS*, "It's better for kids to go to their best friend than to their parents for advice on some things"). Or the *EAS* may also

have measured adolescent perceptions of disengaged parents (e.g., from *EAS*, "There are some things about me that my parents don't know," "I wish my parents would understand who I really am…") which would also account for the negative association between the *EAS* and parental acceptance and family cohesion.

In order to assess the idea that the quality of the parent-child relationship may have an effect on the association between adolescent emotional autonomy and adjustment, Lamborn and Steinberg (1993) were interested in using the *EAS* to predict adolescent adjustment as well as investigating the possible moderating effects of parental support on emotional autonomy and adjustment. Testing the idea that parental support will moderate the relationship between high scores on the *EAS* and adolescent adjustment, Lamborn and Steinberg (1993) found that when parental support was low, more emotional autonomy was associated with more behavior problems and more internal distress. However, when parental support was high, more emotional autonomy was associated with fewer behavior problems and less internal distress. Lamborn and Steinberg (1993) concluded that emotional autonomy, measured using the *EAS*, is problematic for adolescent adjustment, though to a lesser extent, when parental support is present. Parental support moderated the relationship between emotional autonomy and adolescent adjustment. However, an interesting note is the strong negative correlation between emotional autonomy and parental support, indicating that those adolescents who scored high on the EAS also rated their parents as unsupportive. This pattern is consistent with Ryan and Lynch's (1989) notion that the *EAS* measured poor family functioning.

In a similar analysis, Furhman and Holmbeck (1995) investigated the moderating effects of familial environments on emotional autonomy and adolescent behavioral adjustment using the *EAS*. Furhman and Holmbeck (1995) found that less emotional autonomy was associated with positive behavioral adjustment (i.e., less behavior problems, more competence, and better school performance) when mothers were rated as high in warmth or low in conflict. Additionally, when mothers were rated as low in warmth and high in conflict, more emotional autonomy was associated with negative behavioral adjustment. Furhman and Holmbeck (1995) propose that the emotional autonomy measured by the *EAS* is an emotional detachment from parents that is adaptive during stressful familial environments. This is in contrast to the previously mentioned interpretation by Lamborn and Steinberg (1993). However, both studies agree that familial context is an important determinant to adolescent adjustment.

Researchers who were interested in the development of adolescent autonomy primarily measured emotional autonomy. Empirical evidence supports the idea that emotional autonomy is associated with poor behavioral adjustment. Some research has considered familial environments as moderating the association between emotional autonomy and behavioral adjustment. Using emotional autonomy to assess adolescent development is a debatable issue. One alternative is to shift the focus towards behavioral autonomy.

2.3 Adolescent Decision making and Behavioral Adjustment

In the research reviewed above, emotional autonomy was the preferred method of measuring adolescent individuation from parents. However, more recently researchers have begun assessing autonomy development by its cognitive-behavioral aspects, such as

the ability to make decisions. During a conceptual analysis of adolescent autonomy Noom, Dekovic, and Meeus (2001) identified attitudinal, emotional, and functional autonomy as the primary domains of autonomy. *Attitudinal autonomy* is defined as a cognitive process with the ability to define goals and make a choice. The ability to define goals emotionally independent of parents and peers is referred to as *emotional autonomy*. *Functional autonomy* is the ability to devise a strategy in order to reach a specified goal. Noom, et al. (2001) found that attitudinal and emotional autonomy increase with age, while functional does not. They speculate that one must be able to make decisions and define goals before they can achieve those goals.

Smetana (1988; Smetana & Asquith, 1994) has found that the types of decisions an adolescent is allowed to make changes over the course of adolescence. Smetana (1988; Smetana & Asquith, 1994) reported that as adolescents become older they began to view decisions concerning multifaceted and personal issues as falling under their own authority and outside of parental jurisdiction, while parents believe that they retain that jurisdiction. This suggests that as adolescents become more cognitively separate from their parents, adolescent behaviors change in a measurable way. It raises the questions: what is the context in which this change occurs and what outcomes is this change associated with?

Bosma et al., (1996) have developed an instrument to measure adolescent decision making. *The Perspectives on Adolescent Decision making Questionnaire* was developed to determine how decision making changes over the course of adolescence, therefore assessing how decision making autonomy is formed and expressed. Bosma et al. (1996) reported that higher levels of decision making where associated with increased

parent-child conflict which is associated with poor behavioral adjustment such as greater deviance and poorer academic competence.

Peterson et al., (1999) used a different approach. They were interested in the parent-child relationship as a predictor of the development of behavioral autonomy (decision making) in adolescents who were around the age of 16 years old. They found that parents who were rated as high in authority, influence, and support had adolescents who were engaged in more decision making behavior. Authority, influence, and support were conceptualized as measures of parent-child connectedness. Peterson, et al. (1999) concluded that the development of behaviorally autonomous (decision making) adolescents occurs with in the context of a parent-child relationship defined by connectedness. These findings are in contrast to the reports by Furhman and Holmbeck (1995) described earlier in this paper. Furhman and Holmbeck (1995) reported that adolescent autonomy develops in the context of a stressful parent-child relationship. However, Furhman and Holmbeck (1995) were measuring emotional autonomy while Peterson et al., (1999) measured behavioral autonomy (decision making).

Lamborn et al., (1996) examined the impact of adolescent decision making and adjustment using different parent-child interaction scenarios. First, they examined unilateral adolescent decision making where adolescents make decisions on their own. They found that unilateral adolescent decision making predicted poor behavioral adjustment such as deviant behavior, lower academic performance, and poor psychosocial functioning. Next, they examined joint decision making where the adolescent and the parent make decisions together. They found that joint decision making predicted positive behavioral adjustment, less deviant behavior, better academic

performance, and better psychosocial functioning. And last, they examined unilateral parental decision making and found that it only significantly predicted school performance by ethnicity. For African-Americans, unilateral parental decision making predicted positive school performance while for European-Americans adolescents it predicted lower school performance. Unilateral adolescent decision making may be the result of uninvolved parents, whereas joint decision making may be indicative of a healthy or positive parent-child relationship which fosters guided behavioral autonomy.

Exploring the area of context and adolescent decision making, Beyers and Goossens (1999) wanted to know if parenting style moderated the relationship between behavioral autonomy and behavioral adjustment. They reported that greater behavioral autonomy, measured using the *Perspectives on Adolescent Decision making Questionnaire* (Bosma et al., 1996), was associated with negative behavioral adjustment such as greater internal distress and deviant behavior, and lower academic competence. They also had a measure for authoritative parenting which was comprised of involvement, psychological control, and parental knowledge scales. Beyers and Goossens (1999) found that adolescents who reported higher levels of authoritative parenting reported lower internal distress and deviant behavior, and better academic competence than those who reported lower authoritative parenting. The interaction between behavioral autonomy and authoritative parenting with internal distress, deviant behavior, and academic competence was non-significant. This indicates that the relationship between behavioral autonomy and internal distress, deviant behavior, and academic competence is not moderated by authoritative parenting.

Similar research was conducted by Noom, Dekovic, and Meeus (1999) who used measures of attachment to form a picture of the parent-child relationship. Noom et al. (1999) were interested in the possible interaction between a global autonomy measure, attachment and adolescent behavioral adjustment in adolescents who were around the age of 15 years old. Their autonomy measure included attitudinal, emotional, and functional domains. The adjustment variables analyzed included social competence, academic competence, self-esteem, problem behavior, and depressive mood. They found that attachment as an indicator of the parent-child relationship was associated with better behavioral adjustment, such as greater academic competence, and less problem behavior and less depressive mood. All three measures of autonomy were positively related to social competence, academic competence, and self esteem, and were negatively related to depressive mood, indicating that during middle adolescence autonomy is a healthy aspect of development. No significant interactions were found indicating that attachment does not moderate the association between autonomy and behavioral adjustment.

Researchers have begun using adolescent decision making as a gauge of adolescent development. Empirical evidence, more often than not, supports the idea that adolescent more decision making is associated with poor behavioral adjustment. However, results are not consistent and researchers are looking for possible contextual moderators of the association between decision making and adjustment.

2.4 Parent-Child Relationship Quality

The area of parent-child relationship quality has received much attention in the literature. For the purposes of this review, only a few articles have been selected which highlight the variables of concern. In the current study, good parent-child relationship

quality is indexed by relationships that are low in conflict and high in acceptance. Empirical evidence indicates that poor quality parent-child relationships are associated with an assortment of unfavorable behavioral adjustment outcomes for adolescents. The most prevalent adverse behavioral adjustment outcomes for adolescents cited in the literature are depressive symptoms and poor school performance.

In order to assess authoritative parenting, Steinberg, Elmen, and Mounts (1989) used adolescent reported measures of parental acceptance, psychological autonomy, and behavioral control to examine the effects of authoritative parenting on school performance and success. They found that in predicting adolescent school performance and success, each measure of authoritative parenting was a unique contributor. Adolescents who perceive their parents as accepting tend to be more successful in school and achieve higher on standardized tests. It can be concluded that high quality parent-child relationships are associated with positive behavioral adjustment in adolescents.

Lamborn, Mounts, Steinberg, and Dornbusch (1991) examined different parenting styles to assess adolescent behavioral adjustment. They reported that adolescents whose parents are characterized as high in acceptance and involved were more likely to be better behaviorally adjusted by displaying higher levels of school performance, lower levels of problem behaviors, and higher psychosocial development (i.e., less depression) than their peers from parents who were not rated as high in acceptance and involvement. Results from this study further link parent-child relationship quality to positive behavioral adjustment in adolescents.

Bednar and Fisher (2003) were interested in how late adolescent decision making was affected by parenting styles. They found that late adolescents who rated their parents

as authoritative (measured here as supportive) were more likely to refer to their parents when making moral and/or informational decisions. Bednar and Fisher (2003) also reported that those late adolescents who rated their parents as authoritarian or permissive were more likely to reference their peers when making decisions. These results show some long-term effects of a healthy parent-child relationship measured here as supportive parenting.

Sheeber, Hops, and Davis (2001) present a theoretical model for understanding factors which may contribute to the development of depressive symptoms in adolescents. They propose that adolescents develop and display internalized problem behaviors such as depression when family environments are characterized by a lack of parental acceptance and are also highly conflicted. Loukas and Roalson (2006) provide empirical evidence to support the model presented by Sheeber et al., (2001). Loukas and Roalson (2006) reported that early adolescents from parent-child relationships who were rated as high in conflict were associated with negative family relations, conduct problems, and depressive symptoms. More empirical evidence is provided by Jenkins, Goodness, and Buhrmester (2002) who reported that highly conflicted parent-child relationships are associated with greater depressive symptoms in adolescents.

Processes between parent and child are associated with behavioral adjustment. Parent-child relationships that are high in conflict are associated with poor behavioral adjustment such as behavior problems and depressed mood. Parents who are rated as accepting generally have children who show better behavioral adjustment such as better school performance. Parents who are rated as supportive are thought to have well adjusted children who are able to make their own decisions. Based on the literature

reviewed about parent-child relationship quality it seems reasonable to hypothesize that adolescents who are making their own decisions can be well adjusted if they are making decisions within the context of a positive parent-child relationship. Specifically, the parent-child relationship quality can moderate the association between adolescent decision making and behavioral adjustment.

2.5 Conceptualization and Statistical Approaches to Testing Moderation

Baron and Kenny (1986) define a moderator variable as, "any variable that affects the direction and/or strength of the relation between an independent or predictor variable and the dependent or criterion variable" (p. 1174). Another way to phrase this is that moderation is the interaction between two variables when predicting a third variable, meaning in this case the interaction between the moderator variable and the independent variable on the dependent variable. The independent variable is assumed to have an association with the dependent variable. When observing moderation, one is looking at the manner in which a moderator variable changes the association between the independent variable and the dependent variable. Statistically, it is unnecessary and desirable for there to be a bivariate association between the moderator variable and either the independent or the dependent variables. It is also unnecessary for a bivariate association between the independent and dependent variables.

In the proposed study it is expected that early adolescent decision making will be correlated to each of the behavioral adjustment variables (dependent variables): behavior problems, depressed mood, and school performance. Although expected, it is not necessary that the moderator variables (parent-child relationship quality-conflict and acceptance) are correlated to the predictor (independent variable-decision making), and

the dependent variables (behavioral adjustment-behavior problems, depressed mood, and school performance). However, to signify moderation, the path between the interaction of early adolescent decision making and parent-child relationship quality (conflict and acceptance) and the dependent variable (behavior problems, depressed mood, or school performance) must be significant. The interpretation would be that the relationship between early adolescent decision making (independent variable) and the behavioral adjustment variables (dependent variables) changes at different levels of parent-child relationship quality (conflict and acceptance).

Multiple regression analysis and analysis of variance are the two common methods that can be used to test for an interaction (for a comparison refer to Cohen, Cohen, West, & Aiken, 2003). A multiple regression is best used to test for moderation when the predictor variables are continuous. Continuous variables are variables that can posses any value with in a given range. Continuous variables are centered so that the coefficients can be easily interpreted and the centered variable has a meaningful zero (Cohen, et al. 2003). A centered variable is one that has been standardized so that the new variable has a mean of zero. Centering predictor variables also reduces multicolinearity by making the distribution of the variable more symmetric, therefore reducing the correlation between predictor variables (Cohen, et al. 2003). A common way to center variables is by subtracting each score from the mean of the scores so that the new center becomes zero. In testing for moderation using multiple regression, one is trying to test whether the relationship between the independent variable and the dependent variable changes as a function of the moderator variable. To do this, the independent variable and the moderator variable are regressed on the dependent variable.

Next, the interaction (independent variable multiplied by the moderator variable) is regressed on the dependent variable to see if there is a significant change in the R value given by the regression equation. Moderation is present when the R square for the regression model should be significant as evidenced by the regression coefficient for the interaction term.

Specifically, a regression analysis is conducted to identify the slope of a line between the independent variable and the dependent variable. Regression analyses also test the significance of the association between the predictors and the dependent variable. When testing for an interaction, the slope of the line between the independent variable and the dependent variable changes at each value of the moderating variable (Aiken & West, 1991). The best illustration of an interaction is to graphically plot the slopes of the regression equation for the independent variable at different levels of the moderating variable against the dependent variable. If an interaction is present, at different levels of the moderator the regression lines will not be parallel and may intercept.

In summary, empirical evidence linking emotional autonomy to adolescent adjustment is inconsistent leaving decision making as an alternative measure for assessing adolescent development of autonomous behavior. It is hypothesized that early adolescent decision making will be associated with poor behavioral adjustment. Further, it is hypothesized that more parent-child conflict will be associated with poor behavioral adjustment and that more parental acceptance will be associated with better behavioral adjustment. Finally, it is hypothesized that conflict and acceptance will moderate the association between early adolescent decision making and behavioral adjustment.

3. METHOD

3.1 Participants

A secondary analysis of data from the Baton Rouge Families and Teens Project, an ongoing dual cohort longitudinal study aimed at exploring the experiences of mothers and teens during the transition into adolescence (Laird, Marrero, & Sherwood, in press), was conducted for the this study. Data were collected from mother-child dyads. Two hundred eighteen families were recruited through the East Baton Rouge Parish public school system. Participation from early adolescents occurred after they completed their fifth grade year of school. The youngest early adolescents were 10 years old and the oldest adolescents were 13 years old with a mean age of 11 years old. Roughly half the sample is female (49%). The sample contained 49% White, non-Hispanics, 47% African-Americans, 3% Asian-Americans, and 1% Hispanics. Mothers reported a mean yearly income between $40,000 and $60,000, 4% of the mothers reported earning less than $10,000 a year while 17% reported earning $100,000 or more a year. 19.7% of the mothers reported earning a graduate degree, 27.5% reported earning a college degree, 39.4% reported at least some college or trade school, 10.1% reported graduating form high school, 2.3% reported attending 10^{th} or 11^{th} grade, and .5% reported attending 7^{th} or 8^{th} grade.

3.2 Procedure

Procedures were approved by the Louisiana State University Institutional Review Board (Appendix A). Mothers gave informed consent and early adolescents gave informed assent in their homes prior to the start of the interview. This consent allowed information to be collected via self-report questionnaires during separate face-to-face

interviews with the mothers and early adolescents. Interviews were conducted during the summer, generally lasted about an hour, and took place in the early adolescents' home.

3.3 Early Adolescent Decision Making Measure

Items pertaining to *decision making* were adapted from those developed by Smetana et al., (2004; see Appendix B). Early adolescents were asked to indicate who makes decisions about 5 items pertaining to different behaviors relevant to early adolescents (e.g., "Who does make decisions about what music you can listen to or TV shows or movies you can watch?"). Responses included *parents decide, parents ask my opinion but parents have the final say, we decide together, discuss together but I have final say,* and *I decide without discussing with my parents*. Numeric values (1, 2, 3, 4, 5) were assigned so that higher scores indicate more *decision making* by the early adolescent. A composite score was computed by taking the mean of the early adolescents' responses to 5 items. Also, for exploratory analysis, a count was performed to determine the number of 'I decide without discussing with my parents' or 'I discuss with my parents but I decide' responses. This score also served as an index of adolescent decision making.

3.4 Parent-Child Relationship Quality Measures

Conflict and *acceptance* were chosen to index parent-child relationship quality because of their importance in the literature. *Conflict* and *acceptance* are the proposed moderator variables. *Conflict* is conceptualized as the frequency and intensity of discussions between mother and early adolescent on issues that are commonly discussed by parents and adolescents. The *conflict* items were initially developed by Robin and Foster (1989; see Appendix C). The original 44-item measure was modified to a 10-item

measure following pilot testing to reduce the length of the interviews. The 10 items with the highest item total correlation were retained. The frequency of *conflict* was assessed by first asking early adolescents to respond how many times the topic (e.g., "cleaning up your bedroom") came up for discussion during the past month. The possible responses included *never, once or twice,* and *lots of times*. Numeric values (0, 1, 2) were assigned so that higher numbers indicated a greater frequency of discussion. The intensity of *conflict* was assessed by asking how angry did the angriest person feel during the discussion. Early adolescents could respond by choosing *calm, a little angry,* or *very angry*. Numeric values (1, 2, 3) were assigned so that higher numbers indicated a greater intensity during the discussion. A composite score was computed by multiplying the frequency by the intensity scores for each of the 10 issues and computing the mean over the 10 issues.

Acceptance was assessed using the *Child Report of Parental Behavior Inventory* (Schaefer, 1965; see Appendix D) acceptance scale. Early adolescents were asked to respond to 14 items (e.g., "My mother tells me she loves me"). Possible response options included *not at all like her, just a little like her, somewhat like her, like her,* and *a lot like her*. Numerical values (1-5) were assigned such that higher scores reflected greater parental *acceptance* of the early adolescent. A mean composite score was computed by taking the mean of the 14 items.

3.5 Early Adolescent Behavioral Adjustment Measures

Behavior problems were measured using 32 items developed by Farrell, Kung, White, and Valois (2000). The scale contains items referencing *physical aggression, nonphysical aggression, delinquency,* and *drug use* (see Appendix E). The participants

were asked to report their amount of involvement in each behavior during the last month of school using a 5-point likert scale; *never, 1 or 2 times, 3 or 4 times, 5 or 6 times,* and *7 or more times*. All items were used to compute an overall *behavior problem* mean composite score. Higher scores indicate more frequent behavior problems.

Child depressed mood was measured with 5 items developed by Orpinas (1993) and was seen to be an internalized behavior problem (see Appendix G). Early adolescents were asked to respond on a 5-point likert scale including: *never, hardly ever, sometimes, often,* and *always*. A mean composite score was created for *child depressed mood* where higher scores indicate greater depressed mood.

The early adolescents were asked to respond by informing the interviewer what grade was assigned to each class in the last month of school. The classes included reading, math, language, spelling, science, and social studies. The early adolescents could respond by choosing one of 5 possible letter grades which include; A, B, C, D, and F. *School performance* was measured by taking the mean of a numerical value assigned to each letter grade for each of the six classes on the past report card to calculate a grade point average on a 4-point scale (GPA, see Appendix F). Higher GPA's indicate greater school performance.

3.6 Analysis of Data

Prior to hypothesis testing, reliability tests were conducted on all variables by calculating Cronbach's alpha to assess internal consistency. Next, univariate statistics were examined for each variable to check for normality. This was accomplished by analyzing the frequency distribution for each variable to ensure that no responses were outside of the possible range for a variable. Once this was satisfied, bivariate correlations

between all variables were produced. After correlations were produced, hypothesis testing began.

3.7 Bivariate Associations

Consistent with Hypothesis 1, it was hypothesized that more early adolescent decision making will be associated with poor behavioral adjustment (more problem behaviors, more depressed mood, and poor school performance). Hypothesis 2 stated that more conflict also would be associated with poor behavioral adjustment. Hypothesis 3 stated that more acceptance would be associated with better behavioral adjustment (less behavior problems, less depressed mood, and greater school performance). And finally, hypothesis 4 stated that parent-child relationship quality would interact with early adolescent decision making such that within the context of high parent-child relationship quality (conflict and acceptance) early adolescents who reported more decision making would report less problem behaviors, less depressed mood, and better school performance than their peers who reported lower parent-child relationship quality.

In order to test hypothesis 4, six multiple regression analyses were implemented based on the method described by Cohen et al., (2003). Multiple regression analysis was used in place of an ANOVA because the predictor variables are continuous. Multiple regression analysis was used to test moderation, the interaction between decision making and the relationship quality variables (conflict and acceptance) on each of the dependent variables (behavioral adjustment-behavior problems, depressed mood, and school performance). First, as recommended by Cohen et al., (2003) the interaction variables decision making and parent-child relationship quality (conflict and acceptance) were

centered by subtracting the mean from each score thus centering the data around zero. This procedure was used because of the continuous nature of the interaction variables.

4. RESULTS

4.1 Descriptive Statistics

Table 1. Cronbach's alpha, Means and Standard Deviations for all Variables

Variable	*N*	*a*	*M*	*SD*	Range
Decision making	218	.44	2.44	.70	1-5
Conflict	217	.67	3.18	1.11	0-10
Acceptance	218	.92	4.26	.77	1-5
Behavior Problems	218	.91	1.39	.39	1-5
Depressed Mood	218	.75	2.63	.83	1-5
School Performance	218	.82	3.23	.71	0-4

Descriptive statistics for all variables are presented in table 1. Simple means indicate that early adolescents reported little unilateral decision making for most items. The mean indicates that decision making was often made jointly with parents on most items. On average, early adolescents reported little conflict with parents. According to the mean, early adolescents also reported that their parents are primarily accepting. The early adolescents in this study reported very few behavior problems. The depressed mood mean, in contrast, was in the middle of the response range. Finally, early adolescents reported having primarily good grades. Reliability analysis indicate that the decision making variable provided somewhat inconsistent data. This is most likely a result of few early adolescents making their own decisions consistently across the various

scenarios. It is expected that not all early adolescents will report consistently making decisions about their behaviors. The low alpha is most likely due to high variability in responses across the different items. In other words, adolescents reported making independent decisions in some, but not all of the five areas. However, the other measures, conflict, acceptance, behavior problems, depressed mood, and school performance are all highly reliable measures.

4.2 Correlations

Table 2. Correlations between all variables

Variable	1.	2.	3.	4.	5.	6.	7.
1. Decision making	--	.21**	-.12	.19**	.21**	-.04	.74**
2. Conflict		--	-.23**	.38**	.35**	-.23**	.10
3. Acceptance			--	-.20**	-.22**	.17**	-.16*
4. Behavior Problems				--	.44**	-.25**	.20**
5. Depressed Mood					--	-.20**	.18**
6. School Performance						--	-.16*
7. Decision making Count							--

* $p<.05$ ** $p<.01$

Correlations were computed between all variables and can be found in Table 2. Of particular interest were the correlations between the early adolescent decision making and adjustment variables. Consistent with hypothesis 1, reports of more early adolescent decision making are significantly ($p < .05$) associated with more behavior problems and more depressed mood. More early adolescent decision making also is associated with

lower school performance as hypothesized but the association is not significant. Consistent with hypothesis 2, adolescent reports of greater conflict are associated with more behavior problems, more depressed mood, and lower school performance. Consistent with hypothesis 3, early adolescents who reported more parental acceptance also reported less conflict, less behavior problems, less depressed mood, and better school performance.

4.3 Regression Analysis

A series of multiple regression analyses were conducted to test the interaction between early adolescent decision making (centered) and parent-child relationship quality (centered conflict and centered acceptance) on the behavioral adjustment variables (behavior problems, depressed mood, and school performance). Variables were centered to avoid problems with multicolinearity.

In the first multiple regression, behavior problems were regressed on decision making, conflict, and the decision making X conflict interaction, see table 3. Early adolescent decision making and conflict significantly predicts behavior problems (R^2 = .175, $p < .001$). The regression coefficients for decision making and conflict both reached significance suggesting that more decision making and more conflict predict more behavior problems. The interaction term was not a significant predictor of behavior problems suggesting that conflict does not moderate the relationship between decision making and behavior problems.

In the second multiple regression, depressed mood was regressed on decision making, conflict, and the decision making X conflict interaction, see table 4. Decision making and conflict are significant predictors of depressed mood (R^2 = .16, $p < .001$).

The regression coefficients for decision making and conflict are both significant suggesting that more decision making and more conflict predicts more depressed mood. The interaction term is not a significant predictor of depressed mood. Conflict does not moderate the association between decision making and depressed mood.

In the third multiple regression, school performance was regressed on decision making, conflict, and the decision making X conflict interaction, see table 5. In this model ($R^2 = .05$, $p < .008$) decision making is not a significant predictor of school performance. Conflict is a significant predictor of school performance. More conflict predicts lower school performance. The interaction term is not a significant predictor of school performance. Conflict does not moderate the association between decision making and school performance. Conflict is the only unique contributor to the variance in school performance for this model.

In the fourth multiple regression, behavior problems was regressed on decision making, acceptance, and the decision making X acceptance interaction, see table 6. Decision making and acceptance significantly predict behavior problems (R^2 -=.07, $p <$ .001). More decision making predicts more behavior problems and more acceptance predicts less behavior problems. The interaction term is not a significant predictor of behavior problems. Acceptance does not moderate the relationship between decision making and behavior problems.

In the fifth multiple regression, depressed mood was regressed on decision making, acceptance, and the decision making X acceptance interaction, see table 7. Decision making and acceptance are significant predictors ($R^2 = .09$,$p < .001$) of depressed mood. The regression coefficients for decision making and acceptance are

both significant. More decision making predicts more depressed mood and more acceptance predicts less depressed mood. The interaction term is not a significant predictor of depressed mood. Acceptance does not moderate the association between decision making and depressed mood.

In the sixth multiple regression, school performance was regressed on decision making, acceptance, and the decision making X acceptance interaction, see table 8. The model did not reach significance ($R^2 = .03$, $p < .061$). Acceptance is a significant predictor of school performance but decision making is not a significant predictor of school performance. More acceptance predicts better school performance, see table 8. The interaction term is not a significant predictor of school performance. Acceptance does not moderate the association between decision making and school performance.

Follow up analysis were conducted with an alternate scoring of the decision making variable. A new decision making variable was computed by counting the number of times early adolescents responded with 'I discuss with my parents but I decide' or 'I decide on my own'. This variable was used to analyze the specific instances when early adolescents were reporting that they make their own decisions. All regression analysis described above were repeated with this alternative decision making variable replacing the original decision making variable. Main effects of decision making were very similar and no significant interactions with the relationship quality variables (conflict and acceptance) were found using this alternative variable.

Standardized and unstandardized regression coefficients as well as *p* values can be found in the tables on the following pages.

Table 3. Decision making and Conflict predicting Behavior Problems

Predictor	*B*	*SE*	Standardized *B*	*p*
Decision making	.10	.04	.18	.005
Conflict	.13	.02	.37	<.001
Interaction	.01	.03	.02	.723

Table 4. Decision making and Conflict predicting Depressed Mood

Predictor	*B*	*SE*	Standardized *B*	*p*
Decision making	.23	.08	.19	.003
Conflict	.25	.05	.33	<.001
Interaction	-.06	.07	-.06	.375

Table 5. Decision making and Conflict predicting School Performance

Predictor	*B*	*SE*	Standardized *B*	*p*
Decision making	-.03	.07	-.03	.64
Conflict	-.15	.04	-.23	.001
Interaction	-.04	.06	-.04	.516

Table 6. Decision making and Acceptance predicting Behavior Problems

Predictor	*B*	*SE*	Standardized *B*	*p*
Decision making	.09	.04	.16	.014
Acceptance	-.09	.03	-.17	.012
Interaction	-.04	.04	-.06	.362

Table 7. Decision making and Acceptance predicting Depressed Mood

Predictor	*B*	*SE*	Standardized *B*	*P*
Decision making	.21	.08	.18	.007
Acceptance	-.21	.07	-.19	.005
Interaction	-.13	.09	-.08	.229

Table 8. Decision making and Acceptance predicting School Performance

Predictor	*B*	*SE*	Standardized *B*	*P*
Decision making	-.02	.07	-.02	.819
Acceptance	.17	.06	.18	.009
Interaction	-.07	.08	-.06	.389

5. DISCUSION

5.1 Overview

The purpose of the current study was to investigate the association between early adolescent decision making and behavioral adjustment within the context of the parent-child relationship. Four hypotheses were addressed. The first hypothesis stated that early adolescents who report more decision making also report more behavior problems, more depressed mood, and lower school performance. Correlations computed within this study provide evidence for significant associations in the hypothesized direction for decision making with behavior problems and depressed mood but not for school performance. The second hypothesis stated that greater conflict would be associated with poor behavioral adjustment. Correlations computed within this study provide evidence for the second hypothesis. Correlations computed within this study also provide evidence to support the third hypothesis, greater acceptance will be associated with better behavioral adjustment. The fourth hypothesis stated that the association between early adolescent decision making and behavioral adjustment will be moderated by parent-child relationship quality (conflict and acceptance). Results indicate that there is no interaction between early adolescent decision making and relationship quality when predicting behavioral adjustment. Parent-child relationship quality did not moderate the association between early adolescent decision making and behavioral adjustment.

Results from the current study provide further evidence that there is an association between early adolescent decision making and some forms of behavioral adjustment. As anticipated, results indicate that those early adolescents who reported more decision making also reported more behavior problems and more depressed mood. However,

early adolescents who made more decisions did not report lower school performance. One interpretation of these findings is that early adolescence is not the appropriate time to make decisions without parental guidance. Smetana et al. (2004) reported that early adolescence is an inappropriate time for one to make decisions regarding multifaceted issues due to the association of decision making and poor adjustment. Results from this study confirm this idea. The majority of early adolescents in this study who reported that they are making decisions are choosing behaviors that are problematic.

Results from this study confirm the idea that greater early adolescent decision making is associated with greater conflict. Peterson, Bush, and Supple (1999) reported that parent-child relationships defined by connectedness predicted the development of healthy decision making behaviors. This suggests that the parent-child relationship plays a role in the development of decision making behaviors. A healthy parent-child relationship may foster adolescents to engage in decision making without engaging in problem behaviors while a conflicted parent-child relationship may allow adolescents to engage in decision making as well as problem behaviors. Without longitudinal data it is impossible to determine whether conflicted parent-child relationships are the environment which leads to early and possibly pre-mature decision making or whether early decision making leads to more conflict the parent-child relationship.

The driving idea behind the current study is that at least some early adolescents who are making decisions are doing so within the context of a supportive environment. It was thought that one reason parents who allow their early adolescents the ability to make decisions do so because they (parents) feel that the early adolescent is ready to make decisions. If this were the case then we would expect that while decision making is

associated with poor behavioral adjustment, it would be associated with poor behavioral adjustment to a lesser extent when considering parent-child relationships defined as either low in conflict or high in acceptance. Specifically, that parent-child relationship quality (conflict and acceptance) would moderate the association between early adolescent decision making and behavioral adjustment. Consistent with previous research (Beyers and Goossens 1999) results from this study do not confirm this idea that parent-child relationship quality moderates the association between early adolescent decision making and behavioral adjustment.

However, there appears to be a compensatory effect. That is, the negative effect (more behavior problems and more depressed mood) of early adolescent decision making is offset by high levels of acceptance. In the regression model, the main effects for decision making and acceptance are exactly opposite for behavior problems and depressed mood. Thus, in families where decision making is made in the context of high parent-child relationship quality (high acceptance), the potential negative effect of decision making is offset by the high relationship quality. However, the positive effect of a high quality parent-child relationship (high acceptance) is also offset by greater decision making.

5.2 Limitations

The strengths of the study include a relatively large sample and relatively reliable measures. However, the study has some limitations. First, the sample was taken from the East Baton Rouge Public School System which may not be representative of other geographic locations across the country. Second, the data are cross-sectional. Longitudinal data are needed in order to assess a better picture of the parent-child

relationship and how it changes and if those changes effect decision making as well as behavioral adjustment.

5.3 Implications for Future Research

This study provides further evidence to support the association between early adolescent decision making and behavioral adjustment. However, it does not provide evidence that this association is moderated by parent-child relationship quality (conflict and acceptance). The results from this study as well as previous studies (Lamborn et. al, 1996, Beyers & Goossens, 1999), support the notion that decision making is associated with poor behavioral adjustment. However, the results from this study contrast the results from Noom et al., (1999) who reported that a measure of global autonomy is associated with positive behavioral adjustment. Consistent with Beyers & Goossens, (1999) decision making was used to assess behavioral autonomy instead of an emotional autonomy scale. Perhaps it would be beneficial to consider multiple measures of autonomous behaviors as well as multiple measures of the parent-child relationship.

In order to test this interaction again future researchers may want to implement longitudinal data. By doing so it would be possible to determine the familial aspects associated with the development of early decision making as well as the ability to track the effects of decision making over time. A larger sample would be helpful as well. That is, it may very well be that decision making is linked to poor behavioral adjustment when it occurs too early and when parents do not respond to their children. It may also be the case that decision making is associated with positive behavioral adjustment when parents have prepared their children to make decisions. A large enough sample may contain the variability necessary to separate those two scenarios. Analyzing differences in ages of

adolescents may also be important to understanding how/when decision making begins to have an adverse effect on behavioral adjustment. It may also be useful to employ multiple measures of parent-child relationship quality to build a more accurate assessment. Also, the decision making variable addressed personal and multifaceted issues instead of a variety of different types of issues (social and moral) that early adolescents may be able to make decisions. This study did not assess gender differences. Future researchers may be interested to find out whether or not the association between decision making and behavioral adjustment differs for boys and girls.

This study provided further evidence linking the association between greater early adolescent decision making and poor behavioral adjustment. The proposed interactions were not found to be significant. However, a compensatory effect was revealed where the possible negative effects of early adolescent decision making can be offset by a high quality parent-child relationship (high in acceptance).

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APPENDIX A: INSTITUTIONAL REVIEW BOARD APPROVAL

Mother Consent Form

1. Study Title: Baton Rouge Families and Teens Project

2. Performance Site: Louisiana State University and Agricultural and Mechanical College

3. Investigator: Dr. Bobby Laird is available for questions about this study, M-F, 8:00 a.m.-4:30p.m., at (225) 578-1730.

4. Purpose of the Study: To learn more about parenting and parent-child relationships as children become adolescents

5. Subject Inclusion: Fifth grade students attending selected elementary schools and their mothers. Up to 250 families will participate.

6. Study Procedures: This is a 3 year longitudinal study. Each summer, you and your child will be interviewed separately in your home. You will be asked questions about **parenting** ("Do you have a family rule requiring your children to tell you where they are and who they are with at all times?"), **family relationships** ("How often do you argue with your child about what they watch on TV?" "How often are you critical of your child?"), and **behavior problems** ("How often does your child get into trouble at school?"). Questions will ask about both positive ("My child feels very close to me.") and negative ("I do not really care much what happens to my child.") feelings and behaviors. The interviews will take about one hour to complete.

7. Benefits: Each participant will receive $25 for today's interview. Participants will receive $35 and $45 for the next two summer interviews. You can choose a gift card at the end of the interview, or you can be mailed a check from LSU a few weeks after the interview. Otherwise, there are no expected immediate benefits to you directly, but the results should help professionals better understand the experiences of parents and pre-teenagers.

8. Risks/Discomforts: The possible risks or discomforts of the study are minimal. You or your child may feel some embarrassment answering questions about private matters, and some of your answers may be embarrassing if other people found out. You may skip any questions that make you uncomfortable.

9. Right to Refuse: Participation is voluntary. You are free to stop the interview at any time.

10. Privacy: To help us protect your privacy, we have obtained a Certificate of Confidentiality from the National Institutes of Health. With this Certificate, the researchers cannot be forced to disclose information that may identify you, even by a court subpoena, in any federal, state, or local civil, criminal, administrative, legislative, or other proceedings. The researchers will use the Certificate to resist any demands for information that would identify you, except as explained below.

The Certificate cannot be used to resist a demand for information from personnel of the United States Government that is used for auditing or evaluation of Federally funded projects. You should understand that a Certificate of Confidentiality does not prevent you or a member of your family from voluntarily releasing information about yourself or your involvement in this research. If an insurer, employer, or other person obtains your written consent to receive research information, then the researchers may not use the Certificate to withhold that information.

The Certificate of Confidentiality does not prevent the researchers from disclosing voluntarily, without your consent, information that would identify you as a participant in the research project under the following circumstances. Although interview questions do not ask directly about abuse or violence, the researchers have a legal and ethical obligation to intervene if they find out that a student or parent is being harmed, or is planning to harm him or herself or other students. Suspected abuse will be reported to Child Protective Services.

Your family will be assigned an ID number. No names will be included on any final research records. Scientific reports will be based on group data and will not identify you or any individual as being a part of this project. All information will be destroyed when it is no longer useful for the reporting of the research.

11. Withdrawal: If you decide that you want to stop participating in the study, please call Dr. Bobby Laird at (225) 578-1730

12. Signatures:

The study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to the investigator. If I have questions about subjects' rights or other concerns, I can contact Robert C. Mathews, Institutional Review Board, (225) 578-8692. I agree to participate in the study described above and acknowledge the investigator's obligation to provide me with a signed copy of this consent form.

Parent's Signature Date

The study subject has indicated to me that he/she is unable to read. I certify that I have read this consent form to the subject and explained that by completing this signature line above, the subject has agreed to participate.

Signature of Reader Date

Pre-Teen Assent Form

Baton Rouge Families and Pre-Teens Project

Your parent has provided permission for you to participate in a research study. The law requires us to ask your parent for permission because you are younger than 18. But, we also want you to know about the study.

The purpose of the study is for us to learn more about how adolescents and their parents get along.

If you agree to participate, you will be interviewed in your home three times. You will be asked to answer questions about your experiences with your parents and about your behavior, including criminal behavior. Your parents will be asked many of the same questions. You may tell the interviewer to skip any questions that are embarrassing to you or that you do not want to answer. You will be called and asked to answer some of the same questions again two times on the telephone.

Only the people working on this project will see your answers. Your answers to the questions will not be given to your parents unless you tell the interviewer that you are in danger. Your parents may ask you about the interview and ask you to tell them how you answered the questions. You do not have to tell them your answers. Your family will be paid each time you participate.

Signing this form means that you agree to participate in the study.

Pre-Teen's Signature Date

Parent's Signature Date
(as a witness)

APPENDIX B: EARLY ADOLESCENT DECISION MAKING QUESTIONNAIRE

This section of the interview was proceeded by the following statements, “In most families parents make the decisions about some things, but kids your age-we’ll call them pre-teens in this interview-make their own decisions about other things. On other things, parents and pre-teens may discuss the issue and come to some agreement. We would like to know who makes decisions in your family.” The possible response categories for pre-adolescents are: parents decide, parents ask my opinion but parents have final say, we decide together, discuss together but I have final say, I decide without discussing with my parents.

1. Who does make the decisions about what music you can listen to or what TV shows or movies you can watch?
2. Who does make the decisions about how you spend your free time?
3. Who does make the decisions about whether you can go to a friend’s house when no adult is there?
4. Who does make the decisions about what you can or cannot do with friends?
5. Who does make the decisions about who can be your friends?

APPENDIX C: PARENT-CHILD RELATIONSHIP QUALITY CONFLICT QUESTIONNAIRE

This section of the interview was proceeded by the following statements, "Next, I'll read you a list of issues that pre-teens and parents sometimes talk about. First, I would like you to decide how often you and your mother have talked about that topic during the last month. The answer can range from never to lots of times. Second, I'll ask you how angry did the angriest person feel during the discussions? The answer can range from calm to very angry." This is a two part question. Part A asks how many times during the past month did the topic come up for discussion? The possible response categories for pre-adolescents are: never, once or twice, lots of times. Part B asks how angry were the discussions? The possible response categories for pre-adolescents are: calm, a little angry, very angry.

1. Cleaning up your bedroom?
2. Talking back to parents?
3. What you can or cannot do with friends?
4. Playing stereo, radio, or TV too loudly?
5. How you spend your free time?
6. Hanging out with friends you're parents don't like?
7. Getting in trouble or making bad grades at school?
8. Lying?
9. The TV shows or movies you watch or music you listen to?
10. Hanging out at a friend's house when no adult is there?

APPENDIX D: PARENT-CHILD RELATIONSHIP QUALITY ACCEPTANCE QUESTIONNAIRE

This section of the interview was proceeded by the following statements, “Next, I’d like you to think about your mother. You can answer from not at all like her to a lot like her.” There are 5 possible response options which are: not at all like her, just a little like her, somewhat like her, like her, and a lot like her.

1. My mother tells me she loves me
2. My mother gives me a hug or a pat on the back
3. My mother makes me feel better after I talk over my worries with her
4. My mother gives me praise when I am good or do good things
5. My mother cheers me up when I am sad
6. My mother makes me feel like I am really important to her
7. My mother smiles at me very often
8. My mother gives me a lot of care and attention
9. My mother believes in showing her love for me
10. My mother tells me I am a good kid
11. My mother is easy to talk to
12. My mother is able to make me feel better when I am upset
13. My mother tells me she appreciates what I try or accomplish
14. My mother enjoys doing things with me

APPENDIX E: BEHAVIORAL ADJUSTMENT BEHAVIOR PROBLEMS QUESTIONNAIRE

This section of the interview was proceeded by the following statements, "Now, I'm going to ask you some questions about how many times you have had each of the following experiences in the last month of school. There are six possible responses, from never to 7 or more times." The possible response categories for pre-adolescents are: never, 1 or 2 times, 3 or 4 times, 5 or 6 times, 7 or more times.

In the last month of school, how many times did you…

1. Break a rule at home?
2. Break a rule at school?
3. Break a rule somewhere other than home or school?
4. Get into trouble at home?
5. Get into trouble at school?
6. Get into trouble somewhere other than home or school?
7. Get in a fight in which someone was hit?
8. Threaten to hit another kid?
9. Threaten a teacher?
10. Threaten someone with a weapon?
11. Shove or push another kid?
12. Hit or slap another kid?
13. Throw something at someone?
14. Put down someone?
15. Spread a rumor?

16. Pick on someone?

17. Exclude someone?

18. Insult someone's family?

19. Give mean looks?

20. Start a fight between others?

21. Skip school?

22. Damage property?

23. Steal from someone?

24. Cheat on a test?

25. Shoplift?

26. Get suspended from school?

27. Get drunk?

28. Smoked cigarettes?

29. Drink beer?

30. Drink wine or wine coolers?

31. Drink liquor?

32. Smoke marijuana?

APPENDIX F: BEHAVIORAL ADJUSTMENT DEPRESSED MOOD QUESTIONNAIRE

This section of the interview was proceeded by the following statements, “For the next set of questions please indicate how often you act in certain ways. Your responses can range from never to always.” The possible pre-adolescent response categories are: never, hardly ever, sometimes, often, always.

1. In the last month, how often were you very sad?
2. In the last month, how often were you grouchy or irritable, or in a bad mood?
3. In the last month, how often did you feel like not eating or eating more than usual?
4. In the last month, how often did you sleep a lot more or a lot less than usual?
5. In the last month, how often did you have difficulty concentrating on your school work?

APPENDIX G: BEHAVIORAL ADJUSTMENT SCHOOL PERFORMANCE QUESTIONNAIRE

This section of the interview was proceeded by the following statements, “Next, I’d like to know what grades you made on your last report card. Fill in the bubble for the letter grade.”

1. What grade did you make on your last report card in reading?
2. What grade did you make on your last report card in math?
3. What grade did you make on your last report card in language?
4. What grade did you make on your last report card in spelling?
5. What grade did you make on your last report card in science?
6. What grade did you make on your last report card in social studies?

VITA

Matthew Donald Marrero was born in Baton Rouge, Louisiana. He is the son of Dennis and Denise Marrero.

Matthew graduated from the University of New Orleans with a Bachelor of Science in psychology in 2004. He will graduate from Louisiana State University in December with a Master of Science in human ecology with a concentration in family, child, and consumer science.